

REMARKS

Applicants have canceled claims 19 and 32 without prejudice or disclaimer to the subject matter recited therein, and expressly reserve all rights to such subject matter. Claims 14-18, 20-31, 33 and 34 remain pending after entry of this amendment. The office action is discussed below.

*The claims are definite*

On pages 2-3 of the office action, the examiner made several indefiniteness rejections. Applicants traverse these rejections.

For definiteness, a claim need only reasonably apprise those skilled in the art of the utilization and scope of the invention. *Hybritech, Inc. v. Monoclonal Antibodies*, 231 USPQ 81, 94-95 (1986). Words are to be given their plain meaning as understood by the person of ordinary skill in the art, particularly given the limitations of the English language. *See* MPEP §§ 707.07(g); 2111.01 (Rev. 1, February 2000). Claims are to be given their broadest reasonable interpretation consistent with applicants' specification. *See* MPEP § 2111 (Rev. 1, February 2000).. In sum, in order to reject the claims on definiteness grounds, it is incumbent on the examiner to show how and why the skilled person having applicants' specification would not be apprised of the invention by the language-at-issue.

Applicants have amended the claims to clarify the identity of the undesired metals. Applicants also have amended claims 15, 20 and 34 to correct the informalities noted by the examiner.

Finally, applicants have amended the claims to more clearly recite that water-soluble monocarboxylates, water-soluble dicarboxylates, monocarboxylic acids or dicarboxylic acids can be used in an exchange with citrate and, optionally, citrate-bound metals. In the office action, the examiner questions whether citrate can be a dicarboxylate, and thus the claims be permissive for an exchange of citrate with citrate (as a dicarboxylate). The claims, however, do not permit such an interpretation because citrate is a tricarboxylate, and the claims do not recite the use of a tricarboxylate in the exchange. Therefore, the claims do not permit citrate to be exchanged with citrate. Accordingly, applicants submit that the claims are clear, and therefore the rejection should be withdrawn.

*The claims are not anticipated by the prior art*

On pages 3-4, the examiner rejected claims 14-17, 19-23, 26, 28, and 31-34 as anticipated by U.S. Patent No. 5,561,115. The examiner contends that the '115 patent discloses the preparation of an albumin solution by adding sodium caprylate to Cohn fractions II and III. The examiner contends that the sodium caprylate separates the colloidal solution into a supernatant phase and a colloidal phase, and that this is not considered a precipitating condition.

On page 4, the examiner rejected claims 14-16, 18-23, 28, 29 and 31-34 as anticipated by U.S. Patent No. 5,372,997. The examiner states that the '997 patent discloses the addition of acetic acid to Cohn fraction V, the adding sodium hydroxide, and then running the solution through an anion exchanger that has been washed with NaCl, which the examiner expects to contain some residual NaCl.

Applicants respectfully traverse these rejections.

At the outset, applicants note that in order to reject a claim under 35 USC § 102, the examiner must demonstrate that each and every claim limitation is contained in a single prior art reference. *See Scripps Clinic & Research Foundation v. Genentech, Inc.*, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991); *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 231 USPQ 81, 90 (Fed. Cir. 1986); *see also* MPEP § 2131 (Rev. 1, February 2000). Not only must the claim limitations be present, an allegedly anticipatory reference must enable the person of ordinary skill to practice the invention as claimed. Otherwise, the invention cannot be said to have been already within the public's possession, which is required for anticipation. *See Akzo, N.V. v. U.S.I.T.C.*, 1 USPQ2d 1241, 1245 (Fed. Cir. 1986); *In re Brown*, 141 USPQ 245, 249 (CCPA 1964).

Where an examiner relies upon concepts of inherency, the examiner must demonstrate that the allegedly "inherent" disclosure of the reference is *necessarily* present, not just possibly in existence. *See Electro Medical Systems, S.A. v. Cooper Life Sciences, Inc.*, 32 USPQ2d 1017, 1020 (Fed. Cir. 1994). In sum, it is incumbent

on the examiner to show that each claim recitation is contained in a single prior art reference. The references are discussed below.

The '115 patent discloses the addition of sodium caprylate to a colloidal effluent. The caprylate acts as a partitioning agent by separating the colloidal solution into a phase containing albumin and a phase containing non-albumin proteins and other debris. The caprylate disrupts the colloid structure so that a phase containing solid particles is formed, and the particles can be removed by centrifugation or filtration. Because the formation of such solid particles amounts to precipitation, the '115 patent therefore teaches the use of precipitating conditions. In direct contrast, applicants' claims recite the use of "non-precipitating conditions," which are nowhere taught in the '115 patent. Accordingly, the '115 patent does not meet the limitations of the claims, and thus it cannot be considered an anticipatory reference.

Turning to the '997 patent, this reference discloses methods of removing aluminum from albumin solutions by chromatographic methods, specifically anion exchangers. The '997 patent, however, does not disclose the presence of citrate in the starting material or the use of water-soluble monocarboxylates, water-soluble dicarboxylates, monocarboxylic acids or dicarboxylic acids as exchange partners for citrate. Accordingly, the '997 patent does not meet the limitations of the claims, and thus it cannot be considered an anticipatory reference.

Applicants submit that the claims are not anticipated by the '115 patent and the '997 patent, and therefore respectfully request withdrawal of the rejections.

*The claimed invention is not rendered obvious by the prior art*

On pages 5-6, the examiner rejected claims 14-29 and 31-34 as obvious based upon the '115 patent or the '997 patent in view of U.S. Patent No. 5,118,794. The '115 and '997 patents were employed in the alternative and applied as before. The '794 patent was cited for disclosing viral inactivation of albumin by heat treatment.

On pages 6-7, the examiner rejected claims 14-34 as obvious over U.S. Patent No. 5,229,498 in view of the '997 patent. The '498 patent was cited for disclosing approaches for removing multivalent metal cations through the use of exchange with monovalent cations. The examiner contends that it would be obvious to use sodium caprylate, tertrate or acetate instead of the NaCl of the '498 patent. The '997 patent was cited for the use of low aluminum glass.

Applicants respectfully traverse these rejections.

At the outset, applicants note the examiner must show all of the recited claim elements in the combination of references that make up the rejection. When combining references to make out a *prima facie* case of obviousness, the examiner is obliged to show by citation to specific evidence in the cited references that (i) there was a suggestion to make the combination and (ii) there was a reasonable expectation that the combination would succeed. Both the suggestion and reasonable expectation must be found within the prior art, and not be gleaned from applicants' disclosure. *In re Vaeck*, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991); *In re Dow Chemical Co.*, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988); *see also* MPEP §§ 2142-43 (Rev. 1, February 2000).

When an examiner alleges a *prima facie* case of obviousness, such an allegation can be overcome by showing that (i) there are elements not contained in the references or within the general skill in the art, (ii) the combination is improper (for example, there is a teaching away or no reasonable expectation of success) and/or (iii) objective indicia of patentability exist (for example, unexpected results). See *U.S. v. Adams*, 383 U.S. 39, 51-52 (1966); *Gillette Co. v. S.C. Johnson & Son, Inc.*, 16 USPQ2d 1923, 1927 (Fed. Cir. 1990); *Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve*, 230 USPQ 416, 419-20 (Fed. Cir. 1986).

Turning to the first obviousness rejection, the deficiencies of the '115 and '997 patents are already discussed in the anticipation section, and the examiner has provided no rationale how their deficiencies can be rectified by reliance on the skill in the art. The teachings of the '794 patent relating to viral inactivation is of no consequence in this regard. The '115 patent is deficient because it does not employ non-precipitating conditions, and the '997 patent is deficient because it does not concern materials containing citrate and citrate removal through exchange with water-soluble monocarboxylates, water-soluble dicarboxylates, monocarboxylic acids or dicarboxylic acids. Thus, because there is no showing from the examiner how these references can render the claimed invention obvious, the rejection should be withdrawn.

In the second obviousness rejection, the examiner contends that one would substitute NaCl with sodium caprylate, sodium tartrate or sodium acetate. However, the examiner does not address the fact that the '498 patent concerns only the exchange

of multivalent metal cations through the use of exchange with monovalent cations, namely the simple inorganic salt NaCl. The '498 patent does not disclose the exchange of citrate with the organic molecules recited in the claims. Thus, there is no incentive or suggestion provided by the '498 patent to the skilled person to arrive at applicants' invention. The '997 patent provides no meaningful modifications in this respect. As explained above, the '997 patent also does not concern citrate and citrate removal through exchange with water-soluble monocarboxylates, water-soluble dicarboxylates, organic monocarboxylic acids or organic dicarboxylic acids.

Applicants respectfully submit that their invention is not rendered obvious by the art, and therefore request withdrawal of the rejections.

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*Request*

Applicants submit that the claims are in condition for allowance, and respectfully request favorable consideration to that effect. The examiner is invited to contact the undersigned at (202) 672-5300 should there be any questions.

Respectfully submitted,

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